

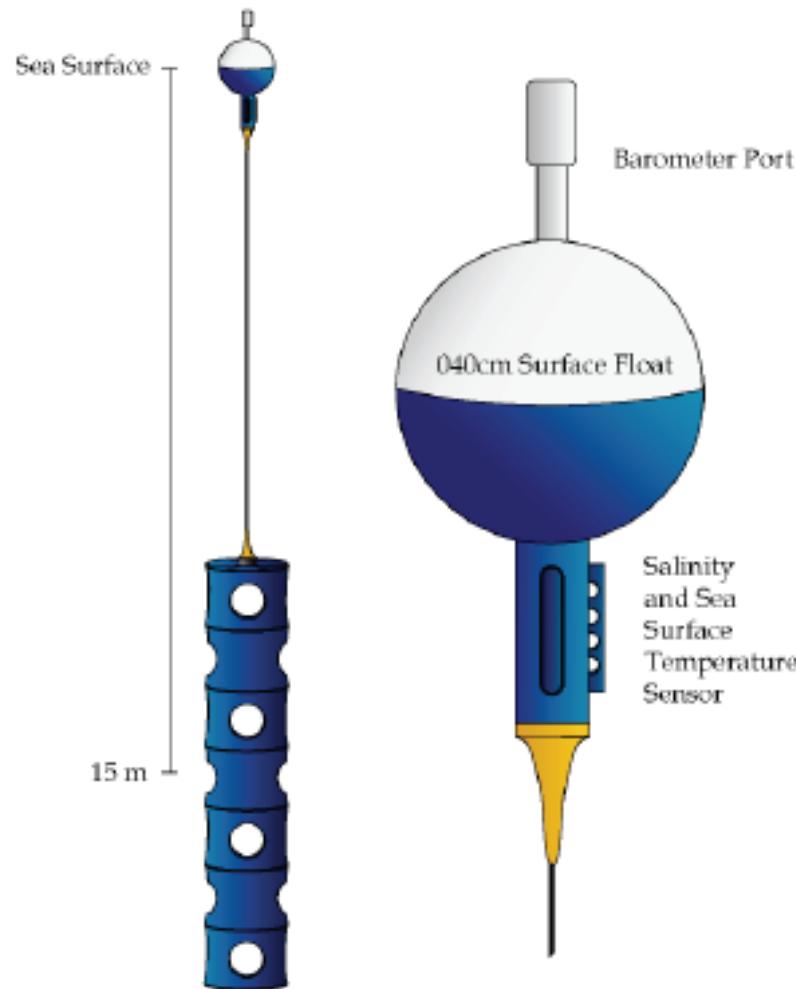
Overview of Lagrangian Salinity Drifter Deployments, Preliminary Results and Future Plans

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Salinity Drifter

Salinity Drifter



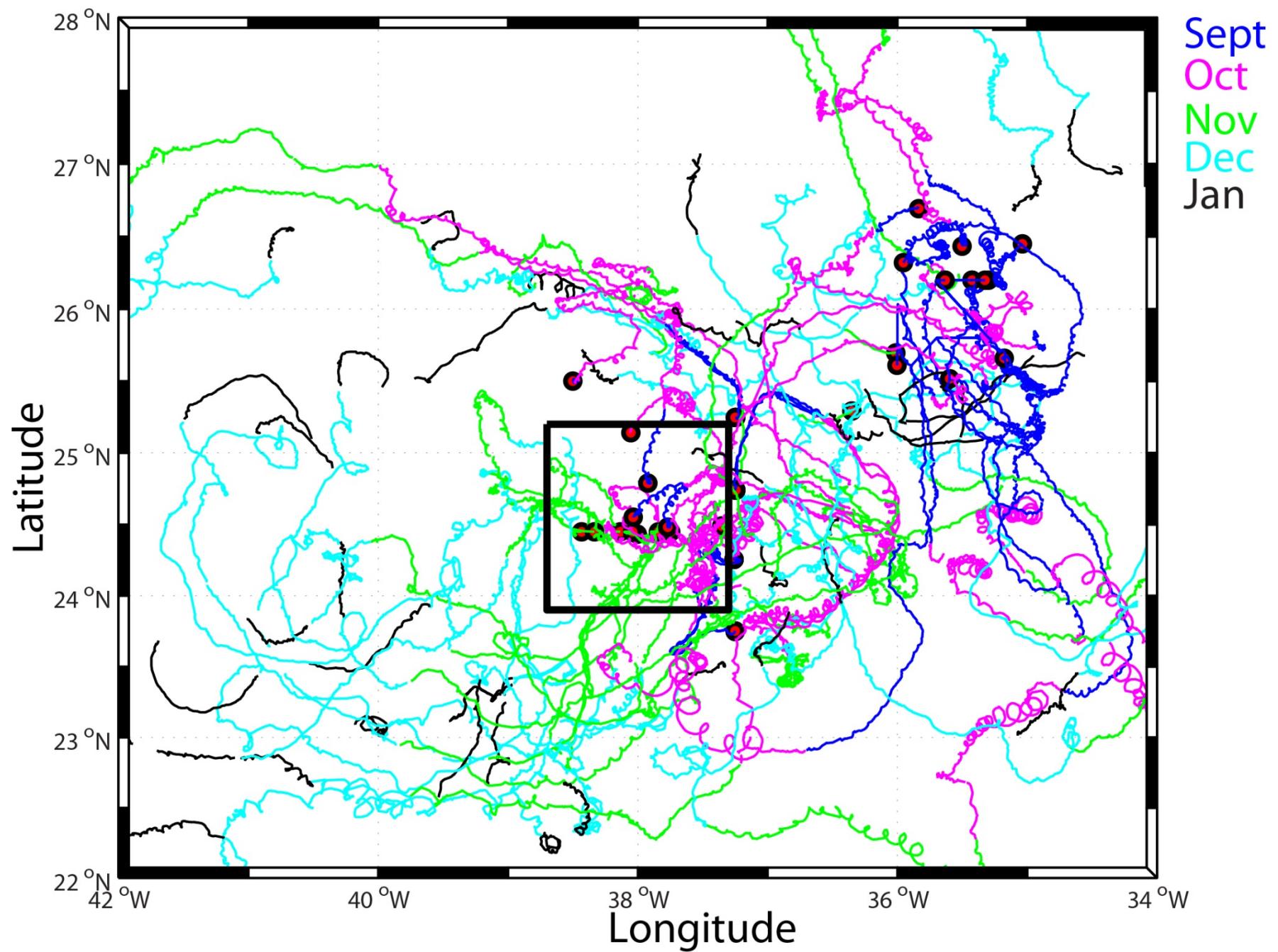
- Lagrangian Currents at 15 m depth;
- GPS;
- 30 min resolution (Lon, Lat, SSS, SST);
- Fit for VOS deployment;

Drifter Deployments in FY 12

Cruise or VOS	# of NOAA's salinity drifters	# of Int'l partners' salinity drifters	# of NOAA's SVP (non-salinity) drifters	# of int'l partner SVP (non-salinity) drifters	deployment window
Strasse cruise	10	5	10	6	8/21-8/27/2012
Knorr cruise	18	0	0	0	9/17-10/3/2012
Rapid cruise	9	0	0	0	11/04/2012
M/N Colibri	3	0	0	0	11/27/2012
Total	40	5	10	6	

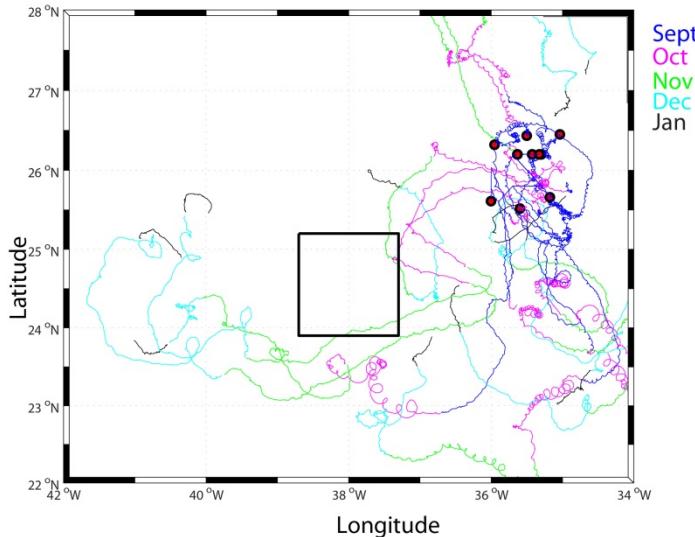
95% of drifters are still operating

SIO-NOAA SVPS drifter tracks as of Jan 7,2013

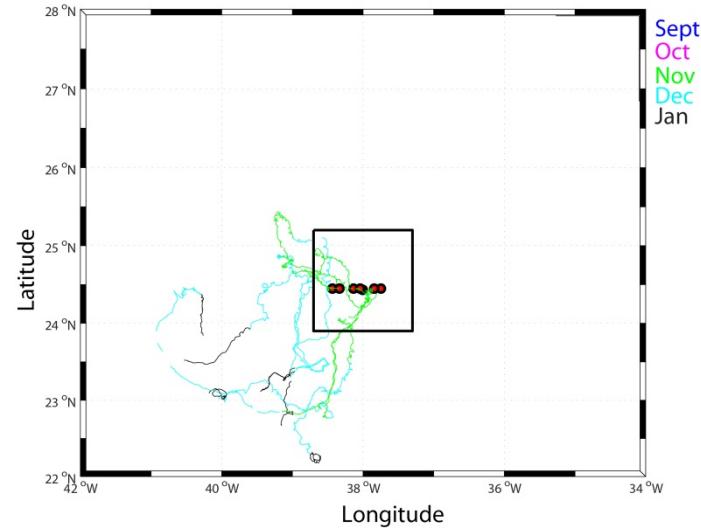


Drifter Tracks by Deployments (Populating the Small Box)

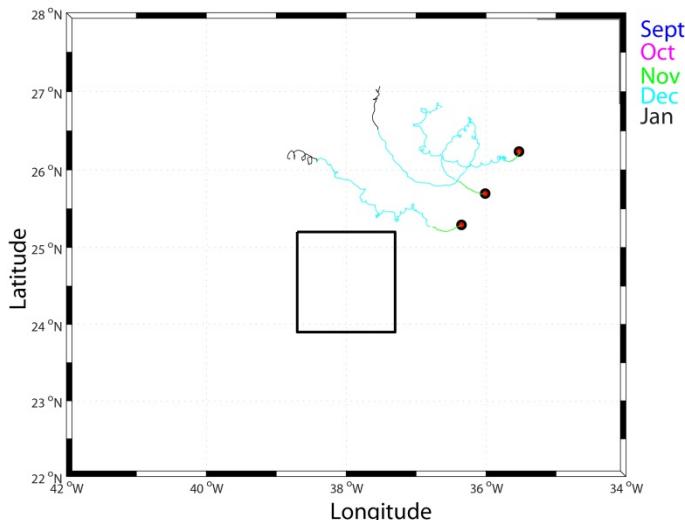
STRASSE CRUISE-08/21-08/27



DISCOVERY DEPLOYMENT (11/04/2012)



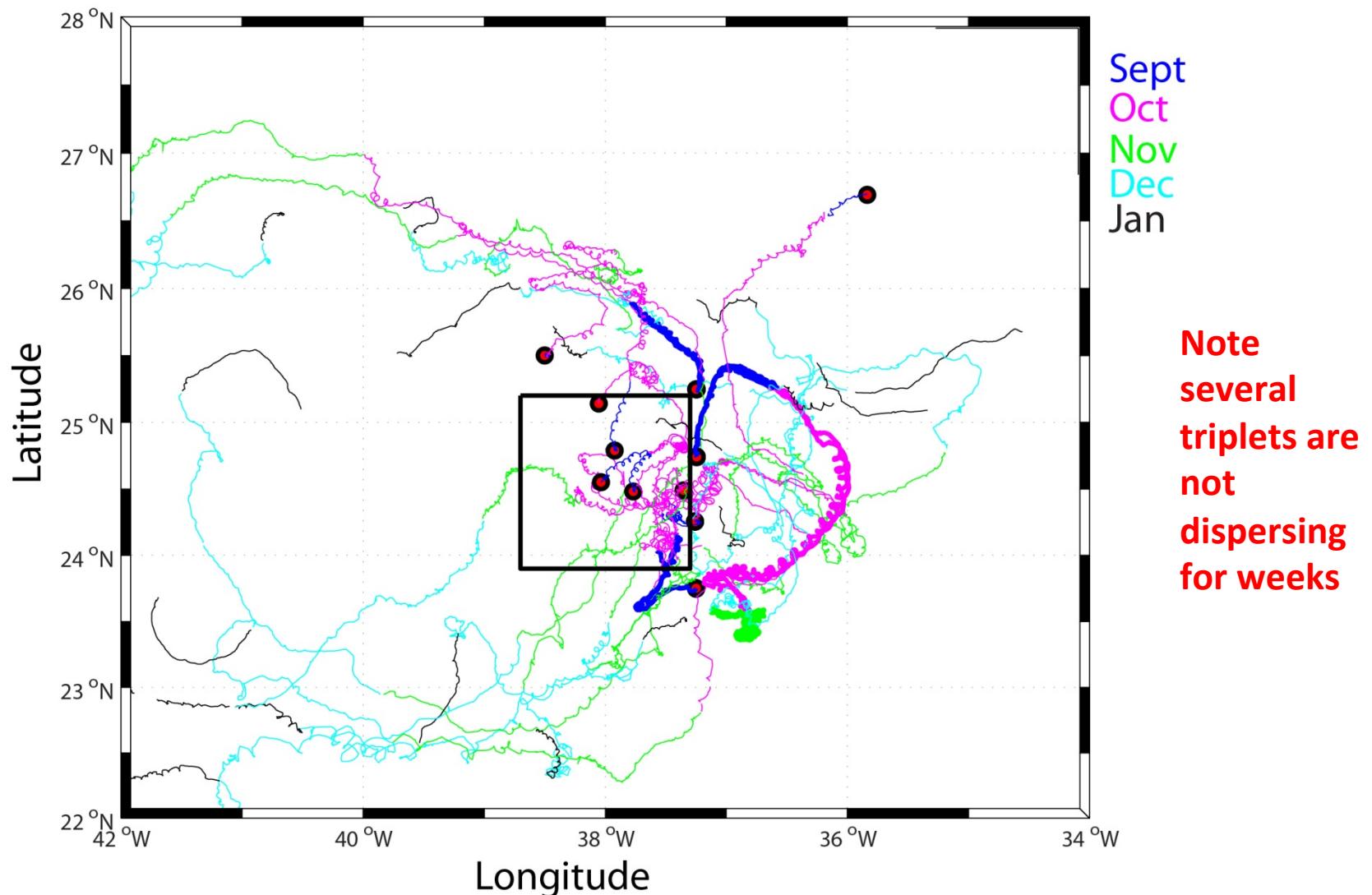
COLIBRI DEPLOYMENT (11/27/2012)



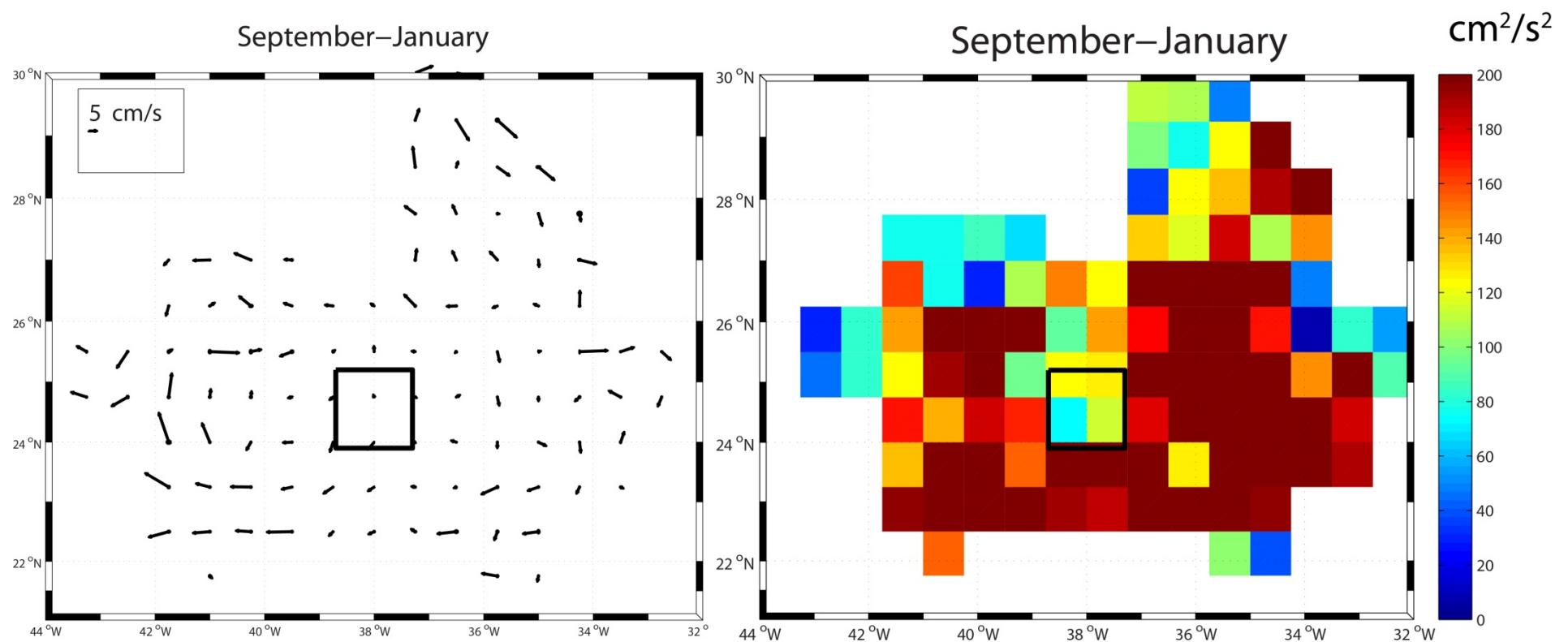
**VERY FEW
DRIFTERS
INTO
SMALL
BOX!**

Knorr Cruise Deployments OK

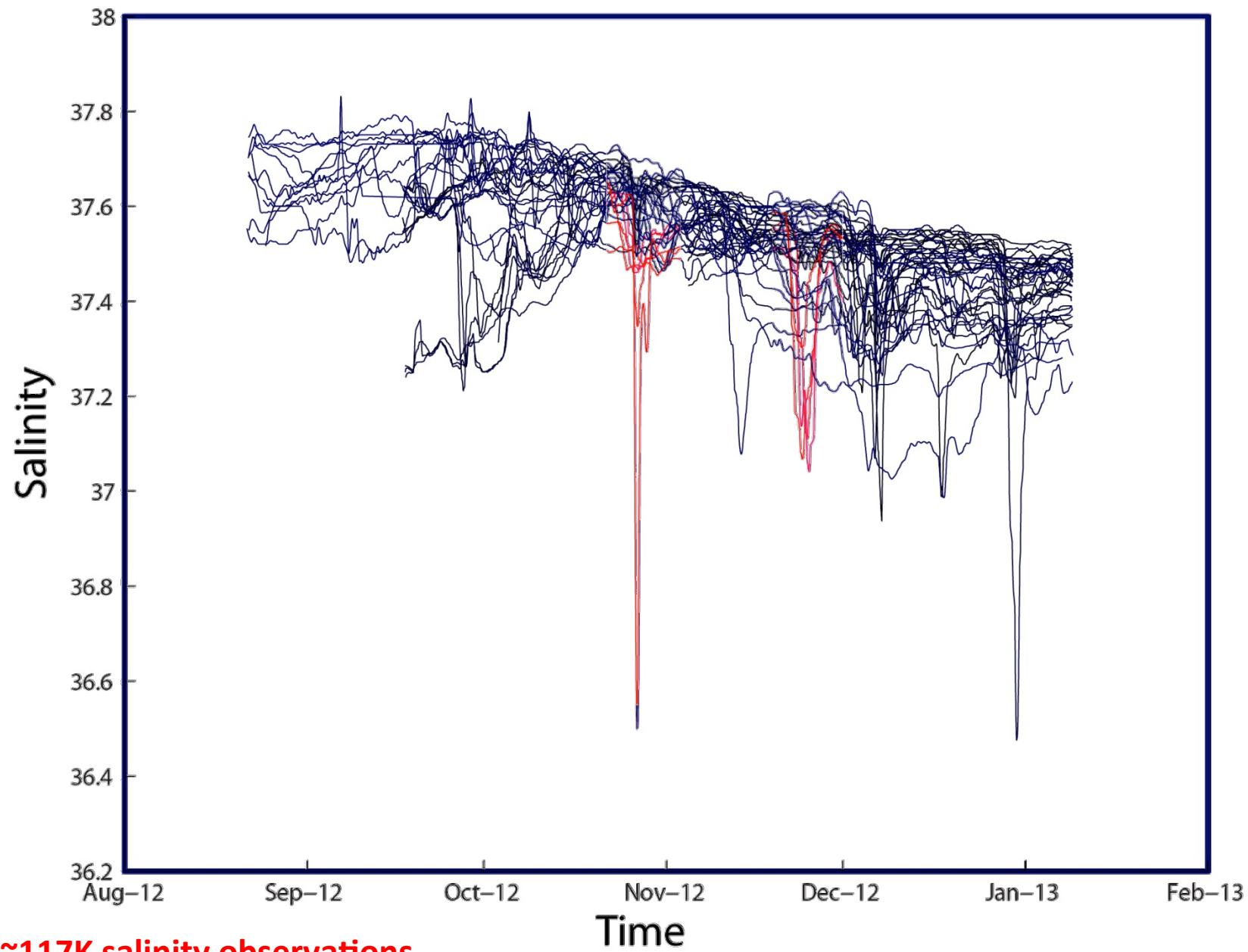
KNORR CRUISE DEPLOYMENTS (9/17-10/3)



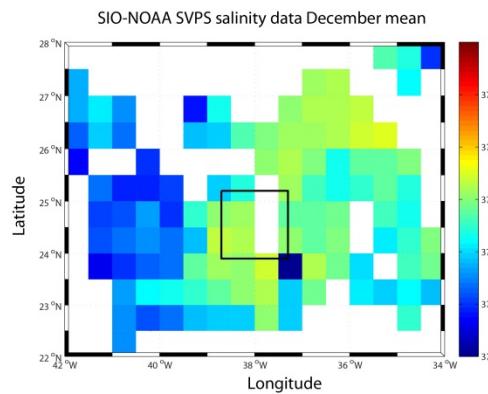
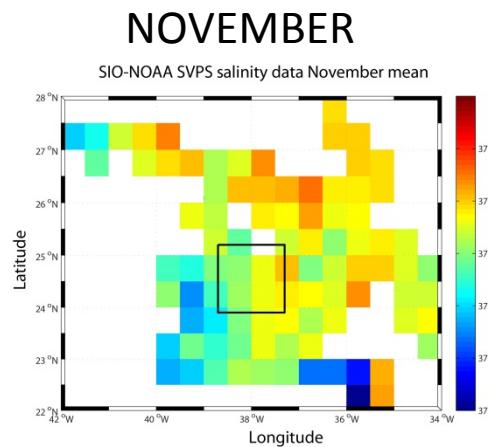
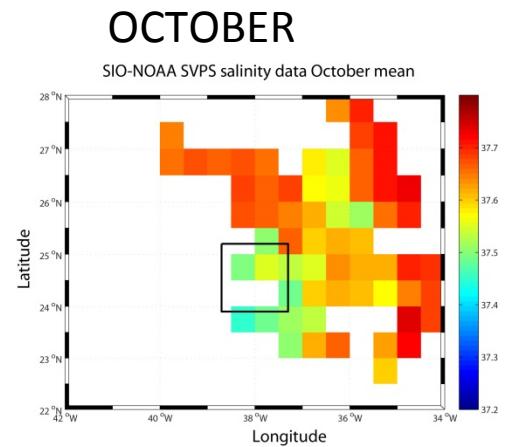
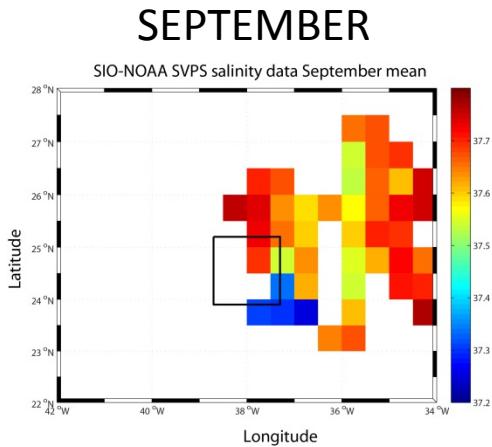
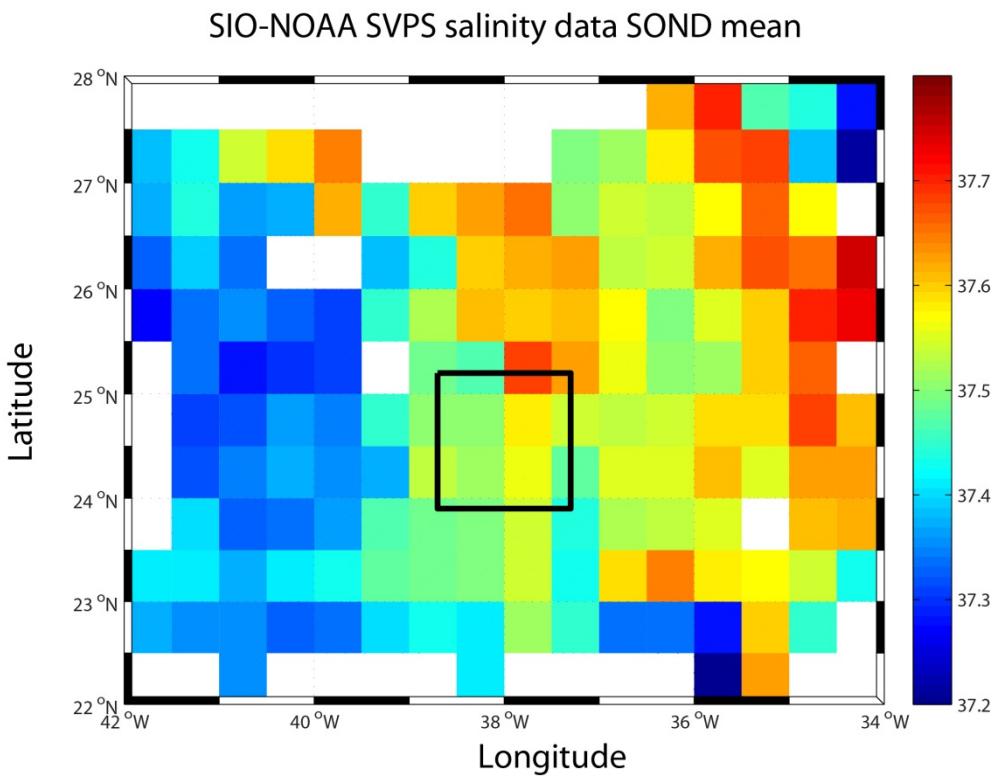
DRIFTER VELOCITY AND EKE



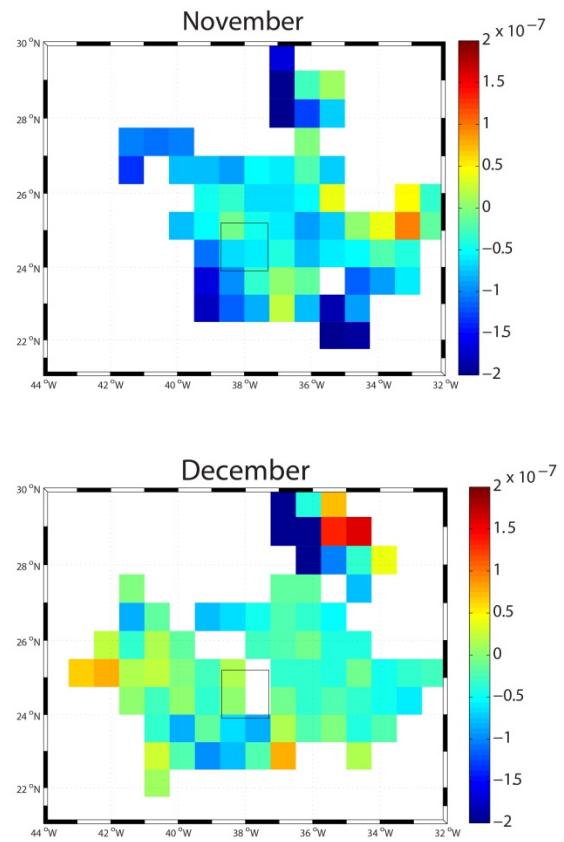
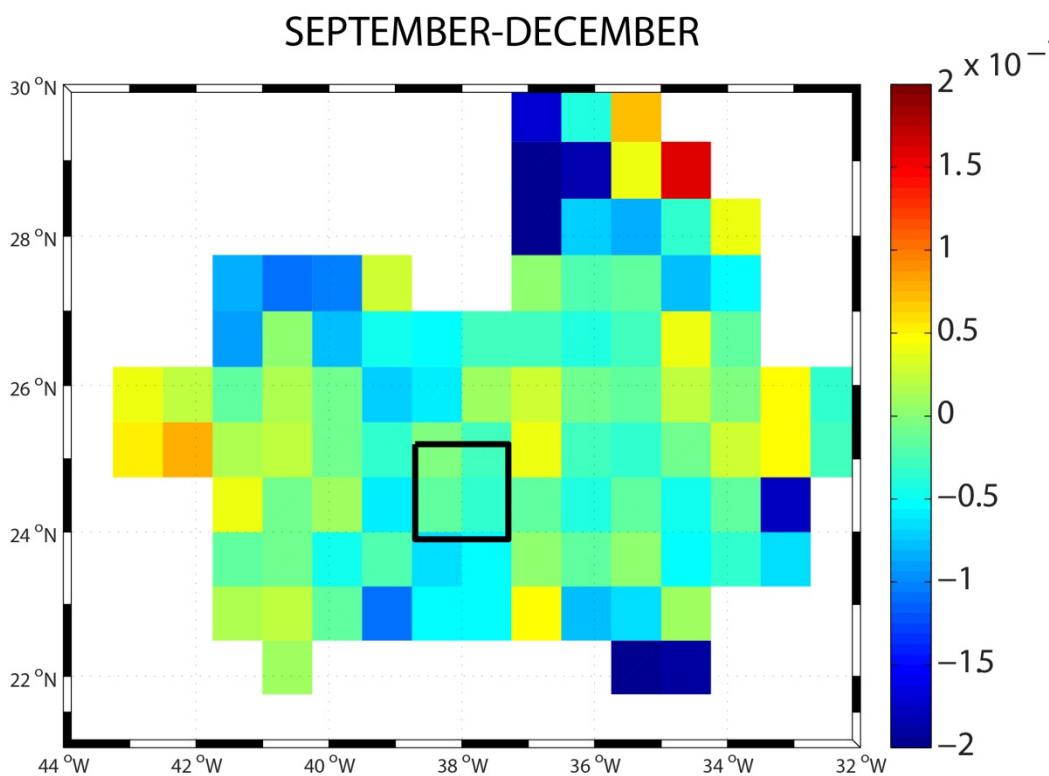
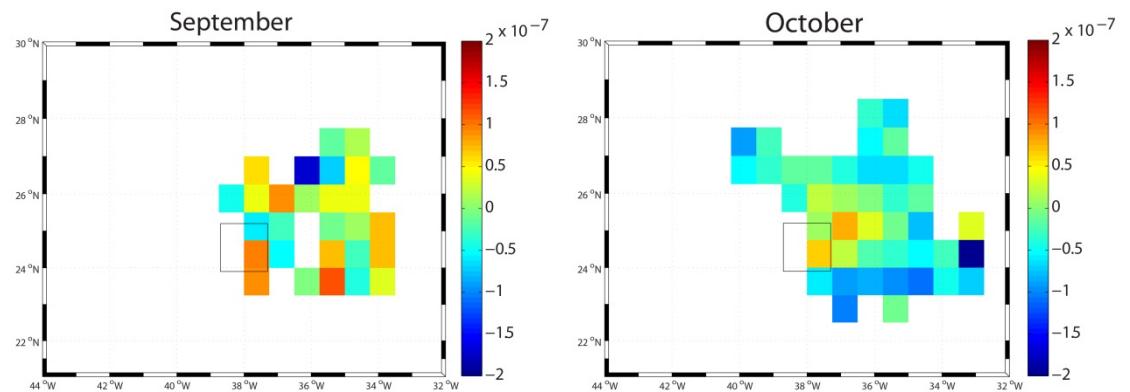
Salinity data, all drifters



AVERAGE SSS AND MONTHLY SSS MAPS



$$\langle \mathbf{D}\mathbf{s}/Dt \rangle = \langle \mathbf{U} \downarrow \mathbf{drifter} \cdot \nabla \langle \mathbf{s} \rangle + \langle \mathbf{U}' \downarrow \mathbf{drifter} \cdot \nabla \mathbf{s} \rangle \rangle$$



Future deployment plans

- 6 salinity drifters and 10 SST drifters are scheduled for deployments from VOS in the next 3 months;
- 42 salinity drifters will be deployed in FY13.
- 70 SVP drifters will also be deployed in 2013

Summary

- Keeping the small SPURS box with sparse cruise opps is a challenge, may need to rely more on VOS;
- Strong (0.5-0.8) freshening events observed;
- Salinity fluxes map show November freshening in SPURS region